



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

4. The corpuscles are stained with picrocarmine, or a mixture of this and Frey's carmine.

5. They are preserved in acid glycerine, and may be mounted for the microscope at any time.—*Read at the sub-section of Microscopy of the A. A. A. S., by Simon H. Gage, Ithaca, N. Y.*

—:o:—

SCIENTIFIC NEWS.

— The U. S. Entomological Commission had a prolonged session in June, immediately after the adjournment of Congress, and since then the members and their assistants have been in the field. As during the previous year the labor was divided, so that Prof. Riley took charge of the cotton worm investigation, while Profs. Packard and Thomas prosecuted the study of the Rocky Mountain locust in the Western Territories.

The organization of Prof. Riley's parties is as follows:

Prof. Stelle proceeded to Texas, making his headquarters somewhere in the Colorado Bottom, where he was assisted by Judge W. J. Jones, of Virginia Point, near Galveston.

Prof. Barnard made his headquarters at Vidalia, Louisiana, so as to fully study those portions of Louisiana and Mississippi which were neglected in 1878 and 1879 on account of yellow fever.

In Mississippi, Prof. R. W. Jones, of the State University, assisted by Dr. E. H. Anderson, of Kirkwood, and Mr. Lawrence Johnson, of Holly Springs, represented the Commission among the cotton lands of that State.

In Alabama, Judge J. F. Bailey, of Marion, assisted by Mr. James Roane, chemist, of Georgetown, D. C., made a special series of experiments.

In Georgia, Prof. J. E. Willet, of Mercer College, made a series of experiments to test the usefulness of fungus germs in the destruction of the worm, having the aid and advice of W. G. Farrow, professor of cryptogamic botany at Harvard, who has been employed by the Commission to study this subject.

In Florida, Mr. H. G. Hubbard, a well-known entomologist of Detroit, Michigan, who has been for some time stationed at Crescent City, is making a series of practical observations and experiments, having his headquarters at Tallahassee.

Prof. Smith was occupied more particularly with the preparation of maps showing the different cotton regions, and indicating a new classification of the cotton belt with reference to the hibernation of the insect.

Mr. E. A. Schwarz, who has been associated with Prof. Riley from the beginning of the investigation, and Mr. W. H. Patton, an experienced entomologist of Connecticut, remained at the headquarters of the Commission in Washington during Prof. Riley's

absence, and took the field later in the season at points to which future experience may direct. Prof. Riley has been at various points in Mississippi, Alabama and Georgia. He has traveled from point to point superintending the work and advising with his assistants. Towards the end of September he expects to go to California to investigate the facts concerning the cultivation of Pyrethrum, which may prove a valuable and safe antidote to the cotton worm. He has already taken steps to introduce this plant into the Southern States.

In their investigation of the Rocky Mountain locust, Profs. Packard and Thomas have been assisted by Prof. Aughey and Mr. Lawrence Bruner, of Nebraska, Dr. John Marten, of Carbondale, Illinois, and Mr. Allen Whitman, of Minneapolis, Minn. In Utah, Messrs. J. L. Barfoot, Orson Howard and Mr. E. E. Wood, of Chicago, have rendered assistance.

Prof. Packard visited Wyoming and Utah, while Mr. Bruner, his assistant for Montana, left home July 1st, going from Bismarck overland to Fort Keogh, and thence up the Yellowstone valley to Bozeman. When last heard from he was at Helena *en route* for Benton. He was in the field two months.

Prof. Thomas left Carbondale on the 10th of July for an extended exploration of those parts of Dakota and British America which embrace some of the most important regions in the permanent breeding grounds of the locust.

The result of the locust investigations for this season shows a remarkable immunity from the attacks of *Caloptenus spretus*, the species of locust under consideration. A single swarm was observed in Utah, and local scattered flights of inconsiderable importance in Dakota and Minnesota, and Eastern Oregon, near Walla Walla. For the first time for many years Montana has been free from the locust, only scattered individuals having occurred in the Yellowstone valley. The researches of the Commission now carried on for four seasons has cleared up the question of the permanent breeding grounds of the locust, which exists in Montana, in the valleys of the Upper Missouri, the Judith basin and the Yellowstone valley with its tributaries. From this region the swarms visit the border States to the eastward, and also pass down into Utah and Wyoming. Colorado is mostly visited by swarms local to that State, while large swarms have arrived from Wyoming in former years. The second report of the Commission is in press and will appear in November, and the third is in preparation.

The investigation of the locust will be resumed in the spring of 1881, Prof. Packard designing to spend the month of June in portions of Utah, Idaho and Montana, so as to bring the work down to June 30th of next year, when by law the special field work connected with the investigation of the Rocky Mountain locust ceases. It is believed that this locust will never be so destructive as in the

past, and due credit has been given by disinterested persons in Kansas, Nebraska, Colorado and Utah, to the practical value of the efforts of the Entomological Commission in obtaining and diffusing such a knowledge of its breeding habits, migrations and distribution as to abundantly justify Congress in ordering the investigation.

— In a long review of Prof. Hayden's 11th Annual Report of the Geological and Geographical Survey of the Territories in the number of *Nature* for July 22, 1880, Prof. A. Geikie, of Edinburgh, expresses the views of nearly all the scientific men in this country and in Europe, in the closing paragraph, which we transfer to our pages. "There will be, we presume, one further report for 1878—the last year of the existence of the Geological and Geographical Survey of the Territories. Though this mode of annual publication necessarily involves incompleteness, and is apt to overload the reports with unimportant detail, there can be no doubt that the series of volumes issued by this Survey form a permanent record of great value, which for the districts to which they refer, will serve as the basis of all subsequent work. It is not without regret that one can regard the cessation of these volumes. On this side of the Atlantic, where they can be calmly considered apart altogether from scientific rivalry and political entanglements, they have been received with general approbation. It is impossible not to be struck by the largeness of the plan conceived by Dr. Hayden for the scope of his survey. Not geology merely but every branch of inquiry touching the natural history, archæology, geography and meteorology of the Territories, was embraced within his plan, and has been illustrated as far as the means at his disposal would allow. To have conceived this broad and scientific scheme, and to have possessed the administrative power to secure and keep in working concert so large and able a body of observers, are qualities of no mean order, and deserve grateful recognition wherever an intelligent interest is taken in the general progress of science and in that human advancement which scientific progress insures."

— S. S. Haldeman, Professor of Philology in the University of Pennsylvania, died at Chickis, Penna., September 10th. He was born near Columbia, Penna., in the year 1812, and received his education at Dickinson College. He was chosen assistant in the New Jersey Geological Survey in 1836, and in the succeeding year occupied a similar position in the Pennsylvania Geological Survey. While engaged in the latter capacity he made some important discoveries which received marked attention at the time, among them that of the oldest fossil known at that time. From 1851 to 1855 he occupied the chair of Natural History in the University of Pennsylvania. In that year he took the same position in Delaware College, and at the same time became professor of

Geology and Chemistry in the Agricultural College of Pennsylvania. He was the author of numerous articles on conchology, entomology and palæontology, published in the various scientific magazines. His work, entitled "Analytic Orthography," consisting of investigations into the philosophy of language, obtained for him in England, the highest Trevelyan prize over eighteen competitors in 1858.

— Mr. G. D. Smith, of Boston, died of paralysis August 6th, aged 46. He was a member of the firm of Palmer, Bachelder & Co., Boston, but was, from boyhood, a student and lover of nature. He devoted himself especially to the Coleoptera, amassing a collection of about 13,000 species, North American and exotic, probably the largest private general collection of Coleoptera in the country. Mr. Smith published no scientific papers, but aided museums and entomologists by the loan and gift of specimens, and thus fostered the zeal of amateurs and local collectors. He was modest, amiable, generous and most industrious, and a loss to the entomologists of Cambridge and Boston, by whom he was held in high esteem. We understand that Mr. Smith's collection is for sale; it would serve admirably as a general collection for a college or university museum.

— Dr. Charles T. Jackson, well-known as a pioneer in American geology and mineralogy, died at Somerville, Mass., Aug. 29th. He was State Geologist of Maine (1836-8), Rhode Island (1839), and New Hampshire (1840), in 1847-50 was U. S. Surveyor of mineral lands in Michigan. He was the author of many geological and mineralogical essays. Dr. Jackson was born at Plymouth, Mass., June 21, 1805.

— Two eggs of the extinct great auk were sold by auction in Edinburgh recently, both being purchased by Lord Lilford, one at £100, the other at 102 guineas—probably the largest sum ever paid for a single egg, with the exception of that of the moa, a single specimen of which was sold at the same place, in 1865, for £200.

— Messrs. A. F. Gray and R. E. Call invite the coöperation of American conchologists in providing the necessary material for a monograph of the Unionidæ of North America. It is designed to figure the anatomy of every species in detail, hence shells with their animals carefully preserved in alcohol are desired.

— An appropriation bill passed by the U. S. House of Representatives provides for a survey of the Gulf Stream from its origin to the Saragossa sea. The plan embraces soundings, deep-sea temperatures and observations of the currents.

— La Opinion Nacional of Caraccas, Venezuela, is publishing a series of articles by A. Ernst, on injurious insects and their

parasites. The *Miris maidis* and *Empusa muscæ* have been discussed.

— Three excellent papers on the three climates of geology, by C. B. Warring, have lately appeared in the *Penn Monthly*. They are mainly critiques of Croll's speculations.

— Mr. George A. Bates, Naturalist Bureau, Salem, Mass., announces the publication of *Life on the Sea-Shore, or the Marine Animals of our Coasts and Bays*, by James H. Emerton.

— Prof. A. E. Grube, of the University of Breslau, died June 3d. He was born in 1812, and will be remembered by his valuable treatises on the invertebrates, especially the worms or Annelides, in the knowledge of which he was *facile princeps*.

— Prof. E. B. Andrews, of the Geological Survey of Ohio, and author of one of its final reports, died Aug. 21st, aged 59.

— Gen. A. J. Myer, the head of the U. S. Signal Service, died Aug. 24th, aged 51.

—:o:—

PROCEEDINGS OF SCIENTIFIC SOCIETIES.

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, Twenty-ninth Meeting, Boston, Aug. 25 to Sept. 1, 1880.—This proved to be the largest meeting of the association ever held, and the members received a right royal welcome from the citizens of Boston. The address of the retiring president, Prof. George F. Barker, was on "Some modern aspects of the Life Question." He said that at the outset a reply to the great question, What is Life? must be evaded by the assertion that the answer is not yet. However, one of the greatest results of modern research has been to establish the fact that living organisms have been brought absolutely within the action of the law of the conservation of energy, and that whether it be plant or animal, the whole of its energy must come from without itself; in fact, an animal like a machine only transforms its energy. Lavoisier's Guinea pig placed in the calorimeter, gave as accurate a heat return for the energy it had absorbed in its food, as any thermic engine would have done. He next referred to the origin of muscular contraction, and arrived at the conclusion that it was due to electrical phenomena, adding the interesting fact that the electrical discharge was not carried to the muscle by the nerve, but was generated within the muscle itself. He said in conclusion that physiologically considered life has now no mysterious passages, no sacred precincts into which the unhallowed foot of science may not enter, and that research has day by day diminished the phenomena supposed to be vital, and that sooner or later every action of the living body will be pronounced chemical or physical."

The address of Mr. Alexander Agassiz, vice-president of sec-